

Amendment and Response
Serial No.: 10/808,124
Confirmation No.: 4531
Filed: 24 March 2004

For: MULTI-FORMAT SAMPLE PROCESSING DEVICES, METHODS AND SYSTEMS

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Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

1. (Currently Amended) A sample processing device comprising:
a rectangular body comprising four identifiable corners at the junctions of four identifiable sides and two major surfaces; and
a plurality of process arrays located within the body, each of the process arrays comprising an input chamber, an output chamber, and a primary process chamber located between the input chamber and the output chamber, wherein the primary process chambers of the plurality of process arrays are arranged in a circular arc, and wherein the input chamber, the output chamber, and the primary process chamber of each process array are interconnected;
wherein the input chambers of the plurality of process arrays are arranged in a rectilinear grid array, and further wherein the output chambers of the process arrays of the plurality of process arrays are arranged in a rectilinear grid array.
2. (Original) A device according to claim 1, wherein the input chambers of at least two of the process arrays comprise a common input chamber.
3. (Currently Amended) A device according to claim 1, the device further comprising a secondary process chamber located between the primary process chamber and the output chamber of each of the process arrays, wherein the secondary process chambers of the process arrays are arranged in a circular arc, and wherein the secondary process chamber of each process array is interconnected with the primary process chamber and the output chamber located proximate the secondary process chamber of each process array.

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4. (Original) A device according to claim 3, wherein the circular arc of the primary process chambers and the circular arc of the secondary process chambers are concentric arcs.

5. (Original) A device according to claim 1, wherein the input chambers of the plurality of process arrays are arranged along a straight line.

6. (Currently Amended) A sample processing device comprising:

a rectangular body comprising four identifiable corners at the junctions of four identifiable sides and two major surfaces; and

a plurality of process arrays located within the body, each of the process arrays comprising an input chamber, an output chamber, and a primary process chamber located between the input chamber and the output chamber, wherein the input chamber, the output chamber, and the primary process chamber of each process array are interconnected;

wherein the primary process chambers of the plurality of process arrays are arranged in a circular arc;

and wherein the output chambers of the process arrays of the plurality of process arrays are arranged in a rectilinear grid array; and

and further wherein the input chambers of the plurality of process arrays are arranged along in a rectilinear grid array, and wherein the input chambers of at least two of the process arrays comprise a common input chamber.

7. (Currently Amended) A device according to claim 6, the device further comprising a secondary process chamber located between the primary process chamber and the output chamber of each of the process arrays, wherein the secondary process chambers of the process arrays are arranged in a circular arc, and wherein the secondary process chamber of each process array is interconnected with the primary process chamber and the output chamber located proximate the secondary process chamber of each process array.

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8. (Original) A device according to claim 7, wherein the circular arc of the primary process chambers and the circular arc of the secondary process chambers are concentric arcs.

9. (Original) A device according to claim 6, wherein the input chambers of the plurality of process arrays are arranged along a straight line.

10. (Currently Amended) A sample processing device comprising:

a rectangular body comprising four identifiable corners at the junctions of four identifiable sides and two major surfaces; and

a plurality of process arrays located within the body, each of the process arrays comprising an input chamber, an output chamber, a primary process chamber located between the input chamber and the output chamber, and a secondary process chamber located between the primary process chamber and the output chamber, wherein the primary process chambers of the plurality of process arrays are arranged in a circular arc, and wherein the input chamber, the output chamber, the primary process chamber, and the secondary process chamber of each process array are interconnected;

wherein the input chambers of the plurality of process arrays are arranged in rectilinear grid array, and further wherein the output chambers of the process arrays of the plurality of process arrays are arranged in a rectilinear grid array.

11. (Original) A device according to claim 10, wherein the input chambers of at least two of the process arrays comprise a common input chamber.

12. (Original) A device according to claim 10, wherein the input chambers of the plurality of process arrays are arranged along a straight line.

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13. (Currently Amended) A sample processing device comprising:

a rectangular body comprising four identifiable corners at the junctions of four identifiable sides and two major surfaces; and

a plurality of process arrays located within the body, each of the process arrays comprising an input chamber, an output chamber, and a primary process chamber located between the input chamber and the output chamber, wherein the primary process chambers of the plurality of process arrays are arranged in a circular arc, and wherein the input chambers of at least two of the process arrays comprise a common input chamber, and wherein the input chamber, the output chamber, and the primary process chamber of each process array are interconnected;

wherein the input chambers of the plurality of process arrays are arranged in a rectilinear grid array, and further wherein the output chambers of the process arrays of the plurality of process arrays are arranged in a rectilinear grid array.

14. (Currently Amended) A device according to claim 13, the device further comprising a secondary process chamber located between the primary process chamber and the output chamber of each of the process arrays, wherein the secondary process chambers of the process arrays are arranged in a circular arc, and wherein the secondary process chamber of each process array is interconnected with the primary process chamber and the output chamber located proximate the secondary process chamber of each process array.

15. (Original) A device according to claim 14, wherein the circular arc of the primary process chambers and the circular arc of the secondary process chambers are concentric arcs.

16. (Original) A device according to claim 13, wherein the input chambers of the plurality of process arrays are arranged along a straight line.

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17. (Currently Amended) A sample processing device comprising:
a rectangular body comprising four identifiable corners at the junctions of four identifiable sides and two major surfaces; and
a plurality of process arrays located within the body, each of the process arrays comprising an input chamber, an output chamber, and a primary process chamber located between the input chamber and the output chamber, wherein the primary process chambers of the plurality of process arrays are arranged in a circular arc, and wherein the input chambers of all of the process arrays comprise a common input chamber, and wherein the input chamber, the output chamber, and the primary process chamber of each process array are interconnected;
wherein the output chambers of the process arrays of the plurality of process arrays are arranged in a rectilinear grid array.

18. (Currently Amended) A device according to claim 17, the device further comprising a secondary process chamber located between the primary process chamber and the output chamber of each of the process arrays, wherein the secondary process chambers of the process arrays are arranged in a circular arc, and wherein the secondary process chamber of each process array is interconnected with the primary process chamber and the output chamber located proximate the secondary process chamber of each process array.

19. (Original) A device according to claim 18, wherein the circular arc of the primary process chambers and the circular arc of the secondary process chambers are concentric arcs.

20. (New) The device according to claim 1, wherein at least one of the plurality of process arrays further comprises at least one valve located between the input chamber and the output chamber.

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21. (New) The device according to claim 6, wherein at least one of the plurality of process arrays further comprises at least one valve located between the input chamber and the output chamber.
22. (New) The device according to claim 10, wherein at least one of the plurality of process arrays further comprises at least one valve located between the input chamber and the output chamber.
23. (New) The device according to claim 13, wherein at least one of the plurality of process arrays further comprises at least one valve located between the input chamber and the output chamber.
24. (New) The device according to claim 17, wherein at least one of the plurality of process arrays further comprises at least one valve located between the input chamber and the output chamber.